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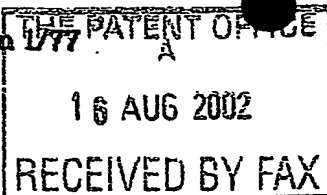
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Signed

Stephen Hordley

Dated 12 September 2003

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Patent
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P01/7700 0.00-0219139.3

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DB/DEP02392/BEP

2. Patent application number*(The Patent Office will fill in this part)*

0219139.3

16 AUG 2002

3. Full name, address and postcode of the or of each applicant *(underline all surnames)*Patents ADP number *(if you know it)*

If the applicant is a corporate body, give the country/state of its incorporation

Designiche Limited
Archer House
Britland Industrial Estate
Northbourne Road
Eastbourne
East Sussex BN22 8PW
United Kingdom

844 6965001

4. Title of the invention

BARRIER SYSTEM

5. Name of your agent *(if you have one)*

BROOKES BATCHELLOR

"Address for service" in the United Kingdom,
to which all correspondence should be sent
*(including the postcode)*102-108 CLERKENWELL ROAD
LONDON
EC1M 5SAPatents ADP number *(if you know it)*

08142291001

6. If you are declaring priority from one or more earlier patent applications, give the country and the date of filing of the or of each of these earlier applications and *(if you know it)* the or each application number

Country

Priority application number
*(if you know it)*Date of filing
*(day / month / year)***7. If this application is divided or otherwise derived from an earlier UK application, give the number and the filing date of the earlier application**

Number of earlier application

Date of filing
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YES

a) *any applicant named in part 3 is not an inventor, or*
b) *there is an inventor who is not named as an applicant, or*c) *any named applicant is a corporate body.*
See note (d))

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Continuation sheets of this form —

Description 4

Claim(s) 2

Abstract —

Drawing(s) 1

10. If you are also filing any of the following, state how many against each item.

Priority documents —

Translations of priority documents —

Statement of inventorship and right to grant of a patent (Patents Form 7/77) —

Request for preliminary examination and search (Patents Form 9/77) —

Request for substantive examination (Patents Form 10/77) —

Any other documents (please specify) —

11.

I/We request the grant of a patent on the basis of this application.

Signature

Date

Brookes Batchelor 16/8/02

12. Name and daytime telephone number of person to contact in the United Kingdom

DAVID BAILEY

01892 510600

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BARRIER SYSTEM

The present invention relates to a barrier system, in particular to a barrier system of particular use in queuing situations, deterring entry of personnel into prohibited areas and for guiding flows of people.

A well-known system for directing queues involves a device including vertically supported post carrying at its upper end on one side therefore a length of webbing retractably mounted upon a tensioned reel. The free end of the webbing includes an attachment element which is adapted to be retained by a corresponding connecting element on the opposite side of the upper end of the post. By this arrangement, a plurality of such devices can be linked to form a barrier.

Such barriers are highly effective but are cumbersome. They are not well adapted for ease of movement. The present invention seeks to address this problem.

In its broadest sense, the present invention provides a barrier system comprising a main pillar and at least one demountable satellite pillar wherein each of said main and satellite pillars includes rolling means, such as wheels or castors, enabling the pillar to be moved easily along a surface. Each of the pillars is joined to an adjacent pillar by at least one retractable webbing assembly.

Preferably each pillar is joined to each adjacent pillar by two retractable webbing assemblies.

In one embodiment, each retractable webbing assembly comprises a length of webbing mounted at a first end thereof to a tensioned reel for retraction there into and mounted at a second end thereof to an attachment element adapted to be received and retained by a corresponding connecting element upon the adjacent pillar.

In an alternative embodiment, each retractable webbing assembly comprises a length of webbing mounted at a first end thereof to a first tensioned reel for retraction there into and at a second end thereof to a second tensioned reel for retraction there into; the first and second reels each being mounted upon a respective pillar.

5

Typically, the main pillar is connected to two satellite pillars. Any number of further satellite pillars may be attached to these satellite pillars in series.

10

The above and other aspects of the present invention will now be described in further detail, by way of example only, with reference to the accompanying figures in which:

Figure 1 is a perspective view of an embodiment of a barrier in accordance with the present invention in an expanded or operative configuration;

15

Figure 2 illustrates more closely the method of retaining the webbing in position in the embodiment of Figure 1;

Figure 3 illustrates a braking arrangement for the wheels of the embodiment of Figure 1; and

20

Figure 4 is a plan view of the embodiment of Figure 1 in a retracted or stowed configuration.

25

Referring to the figures, an embodiment of a barrier in accordance with the present invention may typically include a main pillar 10 and demountable first and second satellite pillars 11,12

30

In the embodiment shown, satellite pillars 11,12 are demountable by means of their each carrying a horizontal bar 13 receivable in a corresponding elongate cavity 14 provided in main pillar 10.

Main pillar 10 and each of the satellite pillars 11,12 includes a pair of wheels. As illustrated, main pillar 10 has a pair of wheels 20 mounted at respective ends of a common axle mounted on the frame of the pillar 10, whereas satellite pillars 11,12 have separate wheels 21,22 mounted independently. Alternative arrangements will be readily apparent to the skilled person, including the use of alternative rolling means such as castors.

Pillar wheels 20,21,22 are lockable to prevent their rotation and thus movement of the respective pillar once at the desired location. Suitably this is achieved by a simple brake mechanism of the kind typically found on a child's pram or buggy in which a bar 23 (Figure 3) or similar element is caused to bear down upon the rolling surface of the wheel (typically a deformable rubber composition) by means of the bar 23 being pivotally mounted upon a frame 24 and actuatable by means of a foot-operated pedal 25.

In the embodiment shown, each satellite pillar 11,12 is joined to the main pillar 10 by two lengths of webbing 30,31. The webbing may be mounted by any conventional means. In the embodiment shown, a first end of each length of webbing is mounted on a tensioned reel 34 in which the webbing is spring-biased into a retracted or non-extended configuration. A second end of the webbing is terminated in an attachment element 32 which is adapted to be received by a corresponding connecting element 32 which is adapted to be received by a corresponding connection element 33 mounted upon a respective pillar.

The specific mounting of the webbing is not essential and many suitable arrangements will be apparent to the skilled person. In the embodiment shown, each tensioned reel 34 of the webbing assemblies whereby the main pillar 10 is joined to adjacent satellite pillars 11,12 is mounted a main pillar 10. Tensioned reel 34 could equally well be mounted upon each satellite pillar.

In an alternative embodiment, not shown, both ends of the webbing 30,31 are retractably mounted upon respective tensioned reels.

5 Suitably, the webbing is formed from a reflective material and may carry suitable wording by way of a notice, for example "KEEP OUT" or "STAND BACK" or arrows indicating a direction of movement. The webbing may also be connected to an alarm system activated, for example, upon contact with the webbing.

10 The barrier may also include illumination modules 40, powered by internal batteries or an external supply. One area where it is envisaged that the present barrier will find great use is as a mobile barrier for erecting adjacent to an aircraft when standing at an airport gate. The barrier can be used to direct passengers away from hazards such as the engines or the wings generally. Particularly for night-time use, the addition of illumination will be of great benefit.

15 It will be appreciated that any number of satellite pillars 11,12 may be connected in series to a central main pillar 10 to provide a barrier of substantially any length.

20 In the preferred embodiments, main pillar 10 includes, for additional support, small wheels or castors 41. Typically, there are mounted below a plate 42 of the pillar 10 which can also act as a support for supplementary articles depending upon the context in which the apparatus will be used, such as a fire extinguisher.

CLAIMS

1. A barrier system comprising a main pillar and at least one demountable satellite pillar; wherein each of said main and satellite pillars includes rotatable rolling means, said rolling means including locking means to prevent rotation of said rolling means; wherein each of said pillars is joined to an adjacent pillar by at least one respective retractable webbing assembly.
2. A barrier system as claimed in Claim 1 wherein the rolling means comprises a pair of wheels.
3. A barrier system as claimed in Claim 2 wherein the locking means comprise a brake assembly comprising a bar acting against the rolling surface of at least one of the wheels.
4. A barrier system as claimed in any one of Claims 1 to 3 wherein each pillar is joined to each adjacent pillar by two retractable webbing assemblies.
5. A barrier system as claimed in any one of Claims 1 to 4 wherein each retractable webbing assembly comprises a length of webbing mounted at a first end thereof to a tensioned reel for retraction there into and mounted at a second end thereof to an attachment element adapted to be received and retained by a corresponding connecting element upon the adjacent pillar.
6. A barrier system as claimed in any one of Claims 1 to 4 wherein each retractable webbing assembly comprises a length of webbing mounted at a first end thereof to a first tensioned reel for retraction there into and at a second end thereof to a second tensioned reel for retraction there into; the first and second reels each being mounted upon a respective pillar.

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7. A barrier system as claimed in any one of Claims 1 to 6 comprising a further satellite pillar demountably carried by at least one of said satellite pillars.

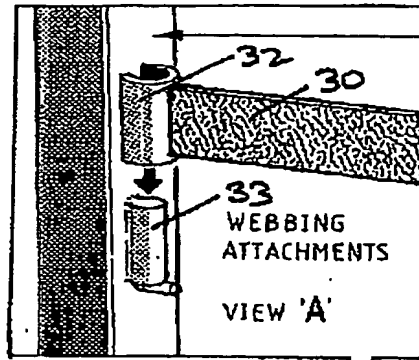


FIGURE 2

WEBBING UNITS CAN BE LINKED AND ANGLED AS REQUIRED TO SUIT GUARDED AREA

FLASHING LIGHT UNITS: EXTERNAL SUPPLY VIA SOCKET, OR BATTERY MODULES

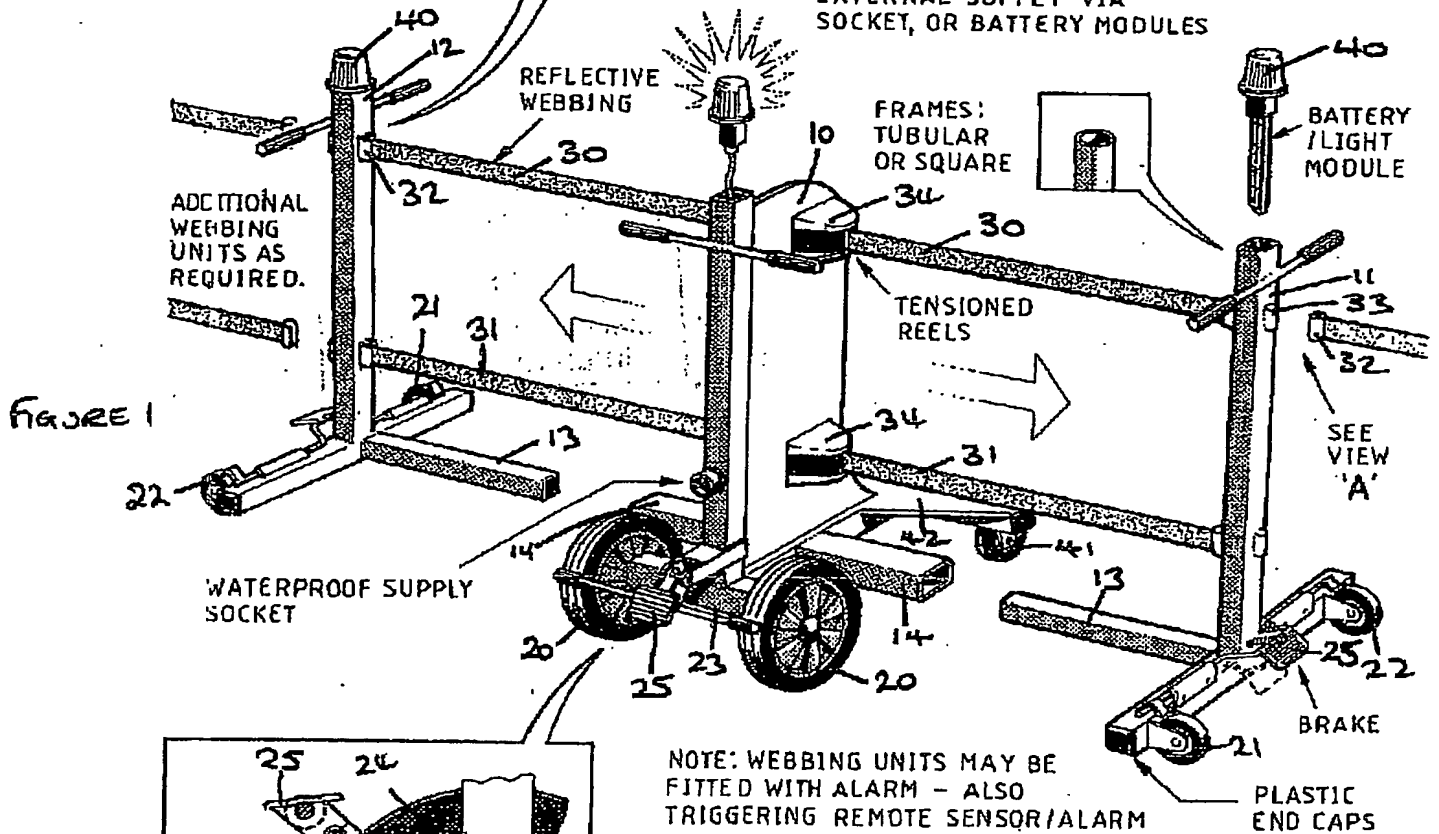


FIGURE 1

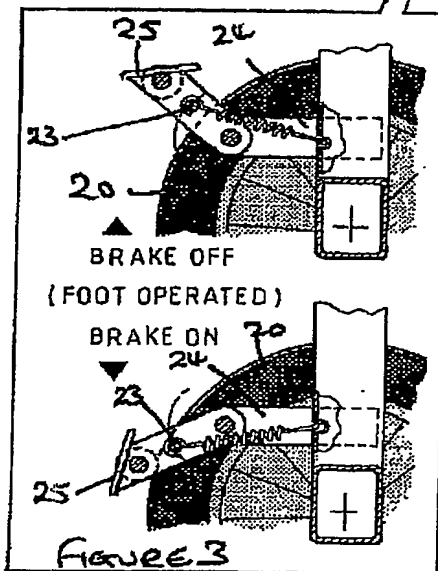


FIGURE 3

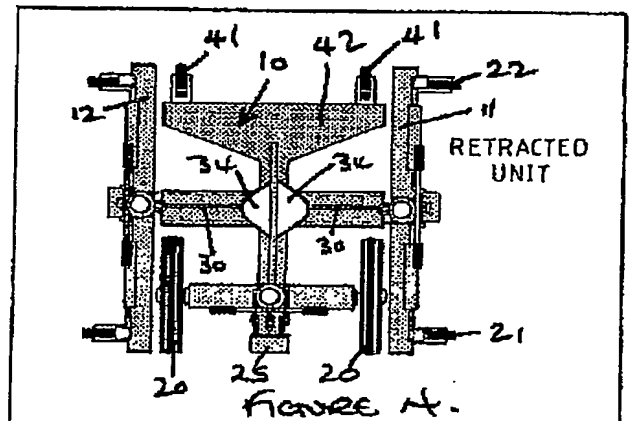


FIGURE 4

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